



Moon Time Family Activity

Overview: Explore the moon and observe its different phases with your children, family, and friends.

Learning Goals:

This activity is designed to help children learn the following:

- The moon looks different to us on different days throughout the month.
- The moon has different phases.
- The phases of the moon make it look a little different every day, but it looks the same again about every four weeks.

Materials:

- “Moon Phases Chart”
- “Moon Phases Cards”
- “Moon Phases Flipbook”
- pencils or crayons
- scissors (for “Moon Phases Cards” and “Moon Phases Flipbook”)
- stapler (for “Moon Phases Flipbook”)

Directions:

Observe, record, and discuss the moon’s phases:

1. Print out the “Moon Phases Chart.”
2. At night, look at the moon with your child and draw what you see in the “Night 1” box on the chart. If you do not have access to a printer, draw what you see on a blank sheet of paper.
3. Wait a few days. Observe the moon again and draw what you see in the “Night 2” box.
4. Continue looking at and drawing the moon every few nights until you have completed the chart. Optional: Take photos of the moon, print out the photos, and put them in your moon chart.
5. Talk to your child about how the appearance of the moon changed throughout the month.
6. Print out the “Moon Phases Cards.” Cut up and scramble the cards. Have fun trying to put them back in the correct order starting with the new moon and ending with the waning crescent. Optional: Cut out and scramble your own drawings or photographs of the moon and try putting them in order from new moon to waning crescent.

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Fun Facts to Share:

- We can only see half of the moon from earth, since the other side is always turned away from us.
- As the moon travels around the earth, we see different fractions of the moon, as it is lit by the sun.
- “Waxing” means growing and is used to describe the moon as it grows from new moon to full moon.
- “Waning” means shrinking and is used to describe the moon as it gets smaller from full moon to new moon.
- The “first quarter” is when the moon has completed $\frac{1}{4}$ of its orbit around the earth. This is when the moon looks like a “half moon.”
- The “last quarter” is when the moon has completed $\frac{3}{4}$ of its orbit around the earth and also looks like a “half moon” to us.

Create a Moon Flipbook:

1. Print out the “Moon Phases Flipbook.”
2. Put the pages in order from 1 to 8, with 1 on top and 8 on the bottom. Staple the pages on the left hand side.
3. Place your left hand on the left hand side of the book. Place your right hand along the right side of the book. Use the thumb on your right hand to flip the pages, starting with the top page and going to the bottom.
4. As you flip the pages, look at and discuss how the moon changes phases.

Optional: Cut out your own drawings or photos of the moon, put them in date order and then staple them on the left side to create a flipbook using your own images.

For more information about the moon and its phases, watch the Space Racers™ episode “Starling Discovers the Moon.”



Moon Phases Chart

Look at the night sky and draw the moon in the "Night 1" box below. Wait a few nights, look at the moon again, and draw the moon in the "Night 2" box. Draw pictures of the moon on other nights until you finish your chart. Hang your chart for family and friends to see.

NIGHT 1

Date: _____

NIGHT 2

Date: _____

NIGHT 3

Date: _____

NIGHT 4

Date: _____

NIGHT 5

Date: _____

NIGHT 6

Date: _____

NIGHT 7

Date: _____

NIGHT 8

Date: _____

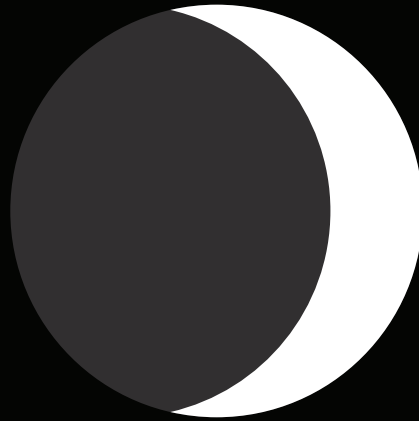


Moon Phases Cards

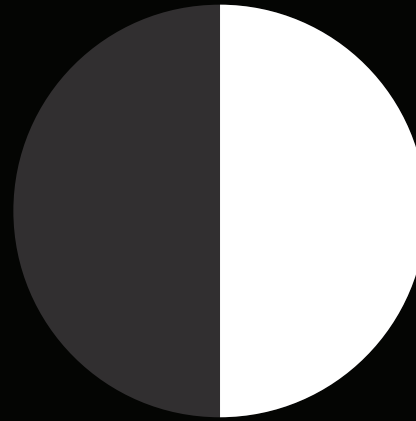
These cards show the different phases of the moon. Print, cut out, and jumble all the cards. Try to put them back in the correct order, from the new moon to the waning crescent.



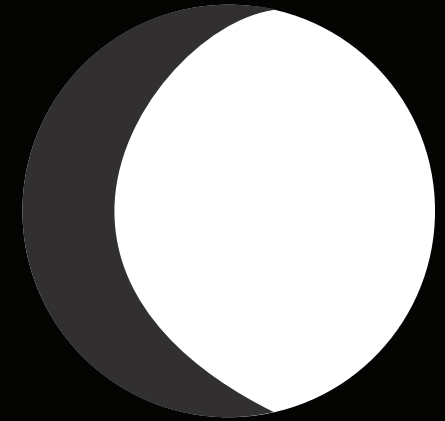
New Moon



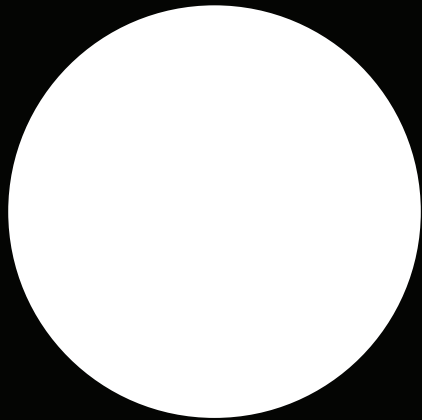
Waxing Crescent



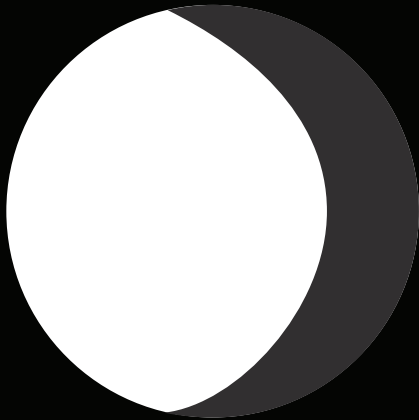
First Quarter



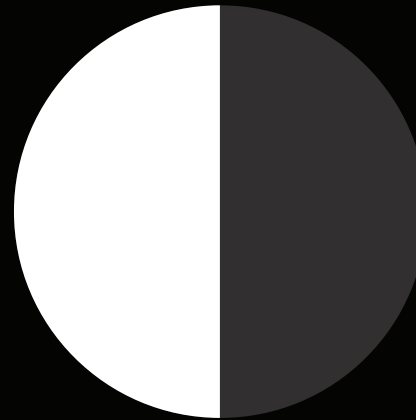
Waxing Gibbous



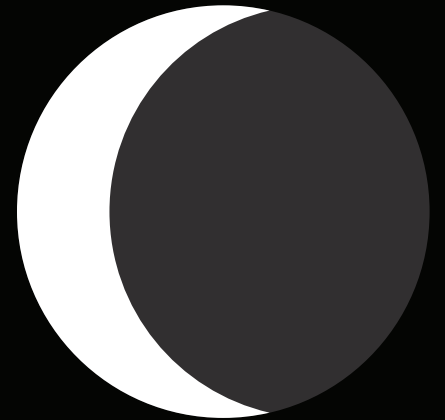
Full Moon



Waning Gibbous










Last Quarter



Waning Crescent

Moon Phases Flipbook

Cut out the cards below and staple them together on the left side. Flip the pages quickly to see the moon change phases. For easier flipping, print the cards on firm paper or paste each one onto a separate index card and staple the index cards on the left side.

<p>1</p> <p>New Moon</p> 	<p>5</p> <p>Full Moon</p> 
<p>2</p> <p>Waxing Crescent</p> 	<p>6</p> <p>Waning Gibbous</p> 
<p>3</p> <p>First Quarter</p> 	<p>7</p> <p>Last Quarter</p> 
<p>4</p> <p>Waxing Gibbous</p> 	<p>8</p> <p>Waning Crescent</p> 